

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed July 14, 2004 (Paper No. 6). Upon entry of this response, claims 1-22 are pending in the application. In this response, claims 1-3, 11-12, 14, 19, and 21-22 have been amended. Applicants respectfully request that the amendments being filed herewith be entered and request that there be reconsideration of all pending claims.

1. **Specification Objections**

The specification has been objected to as containing various informalities, and the Examiner has suggested corrections. The specification has been amended to correct these informalities, adopting each of the corrections suggested by the Examiner. Although these amendments effect several changes to the specification, it is respectfully asserted that no new matter has been added.

2. **Claim Objections**

Claims 1, 2, 11, 12, 19, 21, and 22 have been objected to for various informalities, and the outstanding Office Action has suggested amendments to address the informalities. Applicants have amended claims 1, 2, 11, 12, 19, 21, and 22 according to these suggestions, and respectfully submit that the objection has been accommodated. Therefore, Applicants respectfully request that the claim objections be withdrawn.

Applicants wish to clarify that the amendments to claims 16-19 are made in response to an objection as requested by the Examiner, and not in response to a rejection related to patentability. Furthermore, Applicants assert that these amendments clarify existing limitations, and do not introduce any new limitations that would require a new search.

3. Rejection of Claims 3-5 and 14-16 under 35 U.S.C. §112

Claim 3-5 and 14-16 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as his invention. In particular, the Office Action states that the limitation “the RF cable connection” in claims 3 and 14 has insufficient antecedent basis. Claims 3 and 14 have been amended to recite “the RF connection.” Accordingly, Applicants believe the amendment overcomes the rejection of claim 3-5 and 14-16, and requests that the rejection be withdrawn.

4. Rejection of Claims 1, 2, 6, 9, 12, 13, 17, and 20 under 35 U.S.C. §102

Claims 1, 2, 6, 9, 12, 13, 17, and 20 have been rejected under §102(e) as allegedly anticipated by *Laubach et al.* (U.S. 6,028,860). Applicants respectfully submit that these rejections have been overcome by the claim amendments. A proper rejection of a claim under 35 U.S.C. §102 requires that a single prior art reference disclose each element of the claim. *See, e.g., W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983).

a. Claims 1 and 12

Applicants respectfully submit that *Laubach et al.* fails to teach, disclose or suggest at least the feature of “selecting, based upon the link address, a message that is carried on the RF connection to be forwarded to the at least one host,” (emphasis supplied) as recited in amended claims 1 and 12. *Laubach et al.* discloses a Subscriber Terminal Unit (STU) which is “assigned a Station Unique Identifier (SUID) as part of the acquisition process.” (Col. 4, lines 1-5). The STU receives ATM cells on the RF connection, and uses the SUID to decide whether each cell should be *accepted or discarded*.

The STU has been preprogrammed to identify certain VPI values. One of these VPI values corresponds to the Station Unique Identifier (SUID). The selection process is determined according to the VPIs contained in each individual ATM cell as compared against the preprogrammed VPI values. Only those ATM cells with a VPI value matching the preprogrammed VPI values are retained. Other ATM cells are ignored. (Col. 21, lines 5-15).

Laubach et al. also converts the accepted ATM cells into packets, and forwards the packets to attached PCs 107. (Col. 7, lines 45-50). However, packet forwarder logic 1009 (FIGs. 10 and 17 of *Laubach et al.*) uses the Ethernet packet's Destination Address rather than the SUID to make the forwarding decision. (See Col. 23, lines 5-20 and Col. 15, lines 40-60).

In contrast, one embodiment of Applicants' claimed invention, as defined in amended claims 1 and 12, uses the link address assigned by the head end in deciding whether or not to forward a packet to the connected host. For at least the reason that *Laubach et al.* fails to disclose, teach or suggest "selecting, based upon the link address, a message that is carried on the RF connection to be forwarded to the at least one host," Applicants respectfully submit that amended claims 1 and 12 overcome the rejection. Therefore, Applicants request that the Examiner's rejection of claims 1 and 12 be withdrawn.

b. Claims 2 and 13

Applicants respectfully traverse the rejection of claims 2 and 13, and submit that *Laubach et al.* fails to teach, disclose or suggest at least the feature "the link address comprises an identifier for a frequency in the RF connection" (emphasis supplied) as recited in claims 2 and 13. *Laubach et al.* clearly teaches that the link address is an ATM Virtual Path Identifier (see Col. 4, lines 1-5; Col. 21, lines 5-15). *Laubach et al.* also teaches that the STU's tuner "matches the frequency corresponding to the converter in the headend controller" (Col. 9, lines 35-40), but this does not teach any correspondence between the frequency and a link address.

For at least the reason that *Laubach et al.* fails to disclose, teach or suggest “the link address comprises an identifier for a frequency in the RF connection,” Applicants respectfully submit that *Laubach et al.* does not anticipate claims 2 and 13. Therefore, Applicants request that the Examiner’s rejection of claims 2 and 13 be withdrawn.

c. Claims 6, 9, 17, and 20

Since claims 1 and 12 are allowable, Applicants respectfully submit that claims 6, 9, 17, and 20 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicants respectfully request that the rejection of claims 6, 9, 17, and 20 be withdrawn.

5. Rejection of Claims 3-5 and 14-16 under 35 U.S.C. §103

Claims 3-5 and 14-16 have been rejected under §103(a) as allegedly obvious over *Laubach et al.* (U.S. 6,028,860) in view of *Gurusami et al.* (U.S. 6,031,846). Applicants respectfully traverse this rejection. Since claims 1 and 12 are allowable, Applicants respectfully submit that claims 3-5 and 14-16 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicants respectfully request that the rejection of claims 3-5 and 14-16 be withdrawn.

6. Rejection of Claims 7, 8, 10, 11, 18, 19, 21 and 22 under 35 U.S.C. §103

Claims 7, 8, 10, 11, 18, 19, 21 and 22 have been rejected under §103(a) as allegedly obvious over *Laubach et al.* (U.S. 6,028,860) in view of *Carr et al.* (U.S. 5,608,446). Applicants respectfully traverse these rejections. It is well established at law that, for a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a combination of references, the cited

combination of references must disclose, teach, or suggest, either implicitly, all elements/features/steps of the claim at issue. *See, e.g., In re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988); *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981).

a. Claims 7 and 18

Applicants respectfully submit that claims 7 and 18 are allowable for at least the reason that the proposed combination of *Laubach et al.* in view of *Carr et al.* does not disclose, teach, or suggest at least the feature of “determining that the forwarding...to the at least one host has terminated; and releasing the link address to the head end responsive to determining that the forwarding of information has terminated” as recited in claims 7 and 18.

The Office Action admits that *Laubach et al.* does not explicitly disclose the above-recited limitation. (Office Action, p. 9). The Office Action alleges that *Carr et al.* teaches the above-recited limitation in Col. 11, lines 26-49, and Col. 20, line 66 to Col. 21, line 7. (Office Action, p. 9). Applicants respectfully disagree with this assertion.

The first cited passage appears to disclose, at most, a service provider system that alerts the customer that a predetermined condition has occurred by initiating a call to a customer’s modem and displaying an alert notice on the customer’s PC. The second cited passage appears to disclose a service provider system wherein the Customer Premises Equipment (CPE) periodically sends a heartbeat message to the service provider during a communications session. If the service provider does not receive a heartbeat within a time-out period, the service provider assumes the CPE is disabled and terminates the session.

Carr et al.’s teaching of terminating a link when a heartbeat is missed is not equivalent to determining that forwarding has terminated, nor is it equivalent to releasing a link address. *Carr et al.* thus fails to disclose, teach, or suggest every element of the Applicants’ claimed invention.

Accordingly, the proposed combination of *Laubach et al.* in view of *Carr et al.* does not teach at least the claimed limitations of a “determining that the forwarding...to the at least one host has terminated; and releasing the link address to the head end responsive to determining that the forwarding of information has terminated” as recited in claims 7 and 18. Since the proposed combination of *Laubach et al.* in view of *Carr et al.* does not teach at least the above-described features recited in claims 7 and 18, a *prima facie* case establishing an obviousness rejection has not been made. Thus, claims 7 and 18 are not obvious under the proposed combination of *Laubach et al.* in view of *Carr et al.*, and the rejection should be withdrawn.

b. Claims 8 and 19

Insofar as claims 8 and 19 depend from allowable claims 7 and 18, respectively, Applicants submit that claims 8 and 19 are also allowable.

Additionally, Applicants respectfully submit that claims 8 and 19 are allowable for at least the reason that the proposed combination of *Laubach et al.* in view of *Carr et al.* does not disclose, teach, or suggest at least the feature “the releasing step further comprises sending a DHCP (Dynamic Host Configuration Protocol) packet from the RF modem to the head end” as recited in amended claims 8 and 19.

The Office Action admits that *Laubach et al.* does not explicitly disclose the above-recited limitation. (Office Action, p. 10). The Office Action alleges that *Carr et al.* inherently discloses teaching the above-recited limitation, since *Carr et al.* explicitly discloses TCP and “DHCP is a TCP/IP protocol that enables PCs or workstations to get IP addresses from a DHCP server.” (Office Action, p. 10). Applicants respectfully disagree with this assertion. Applicants admit that DHCP is a higher-layer protocol that is often used in association with TCP/IP, and in

fact, uses TCP/UDP/IP for transport. However, TCP/IP can be, and often is, used without DHCP. Therefore, DHCP is not inherently disclosed by a discussion of TCP/IP.

Accordingly, the proposed combination of *Laubach et al.* in view of *Carr et al.* does not teach at least the claimed limitations of a “the releasing step further comprises sending a DHCP (Dynamic Host Configuration Protocol) packet from the RF modem to the head end” as recited in claims 8 and 19. Since the proposed combination of *Laubach et al.* in view of *Carr et al.* does not teach at least the above-described features recited in claims 8 and 19, a *prima facie* case establishing an obviousness rejection has not been made. Thus, claims 8 and 19 are not obvious under the proposed combination of *Laubach et al.* in view of *Carr et al.*, and the rejection should be withdrawn.

c. Claims 10, 11, 21, and 22

Since claims 1 and 12 are allowable, Applicants respectfully submit that claims 10, 11, 21, and 22 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicants respectfully request that the rejection of claims 10, 11, 21, and 22 be withdrawn.

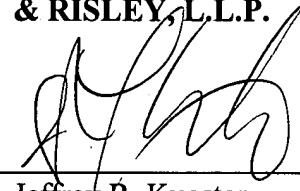
CONCLUSION

Applicants respectfully request that all outstanding objections and rejections be withdrawn and that this application and presently pending claims 1-22 be allowed to issue. Although some dependent claim rejections and some obviousness rejections are explicitly addressed above, the omission of arguments for other claims is not intended to be construed as an implied admission that the Applicant agrees with the rejection or finding of obviousness for the respective claim or claims. If the Examiner has any questions or comments regarding Applicants' response, the Examiner is encouraged to telephone Applicants' undersigned counsel.

Respectfully submitted,

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